

Remarks

This application has been reviewed in light of the Office Action of June 3, 2003. Claims 1-19 are pending, and all claims stand rejected. In response, claims 1 and 9 are amended; claims 3-5, and 14-19 are canceled, without prejudice; and the following remarks are submitted. Reconsideration of this application, as amended, is requested.

Claims 1-4, 6, 8-12, 14, and 16-19 are rejected under 35 USC 102 over Lee US Patent 5,737,104. Applicant traverses this ground of rejection of the claims, as amended.

Amended independent claim 1 incorporates the limitations of as-filed claim 5, which was not rejected on this ground.

Amended independent claim 9 incorporates the limitations of as-filed claim 15, which was not rejected on this ground.

Independent claim 17 is canceled.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Claims 5, 7, 13, and 15 are rejected under 35 USC 103 over Lee US Patent 5,737,104. The limitations of claim 5 are incorporated into amended claim 1, and the limitations of claim 15 are incorporated into claim 9. Amended claim 1 is therefore a rewriting of claim 5, and claim 9 is therefore a rewriting of claim 15, without altering their scope. This rejection will be addressed as though applied to those claims. As so taken, Applicant traverses this ground of rejection.

The following principle of law applies to all sec. 103 rejections. MPEP 2143.03 provides "To establish prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165

USPQ 494, 496 (CCPA 1970)." [emphasis added] That is, to have any expectation of rejecting the claims over a single reference or a combination of references, each limitation must be taught somewhere in the applied prior art. If limitations are not found in any of the applied prior art, the rejection cannot stand. In this case, the single applied prior art reference clearly does not arguably teach some limitations of the claims.

Claim 1 recites in part:

"wherein the first incident beam, the second incident beam, and the third incident beam are not coplanar"

It is agreed that Lee has no such teaching. There are two arguments set forth in the Office Action on this point. The first is that the view of Figure 3A of Lee may be a projection and that the collimators are not in fact coplanar. There are two responses. First, Lee makes no such suggestion. Second, if it were the case that the collimators are not coplanar, then the problem discussed by Lee at col. 8, lines 31-62, Fig. 5, would not be a problem at all, since there would be sufficient room in the half-space on each side of the filter 20. Instead, Lee recognizes the space problem, and comes up with the solution of Figure 5. So Lee's teaching supports patentability of the present invention by recognizing the problem and proposing another solution which may be useful in some circumstances, while the present approach is useful in other circumstances.

The reason that available space is a problem is that the incidence angles are exaggerated in Lee's figures as they are in the figures of the present application, see para. [0024] of the present application: "In Figure 3, the angles of incidence θ_1 , θ_2 , and θ_3 , and particularly the differences between the angles, have been exaggerated to aid in presenting the illustration. In practical applications, the differences between the angles are often on the order of 1-2 degrees, and the angles of incidence are made as small as possible to minimize insertion losses." Because the differences between the angles of incidence are small, the planar approach of Lee with all of the incident beams incident upon a single location may not be possible. The alternative approach of Figure 5 of Lee

may not be practical, because it is difficult to produce the multilayer filters with a uniformly large area as required for Lee's Figure 5 embodiment.

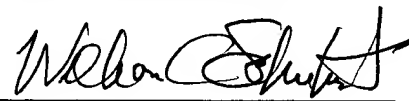
So the approach of the present claim 1, with noncoplanar angles of incidence upon a single location, may be the only practical approach in many circumstances. Lee was thinking in two dimensions, and the present inventor was able to think in three dimensions.

Regarding claim 9, Lee has no such teaching of the use of mirrors. It is argued in the explanation of the rejection that using mirrors would reduce cost and enable a more compact device, and therefore it would be obvious to substitute mirrors for the optical fiber links of Lee. Applicant must traverse this position, as it is without technical basis. One cannot say, absent evidence, that mirrors and their associated mirror-mount structures are less expensive than optical fibers and collimators, which are now commodity items in the optical fiber industry. Nor can one say, absent evidence, that the use of mirrors would produce a more compact device.

Applicant asks that the Examiner reconsider and withdraw this ground of rejection.

Applicant submits that the application is now in condition for allowance, and requests such allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'William Schubert', written over a horizontal line.

William Schubert

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